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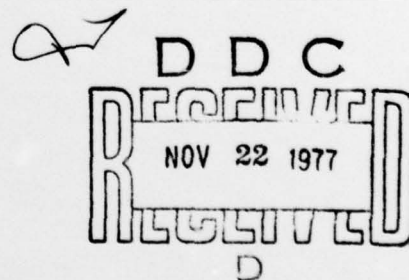
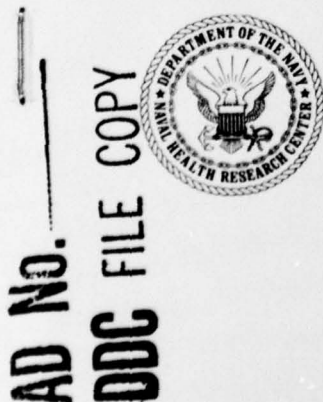
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SITUATIONAL DETERMINANTS OF RETENTION DECISIONS

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REPORT NO. 77-3



NAVAL HEALTH RESEARCH CENTER

SAN DIEGO, CALIFORNIA 92152

NAVAL MEDICAL RESEARCH AND DEVELOPMENT COMMAND

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Situational Determinants of Retention Decisions

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Abstract

Changes in intent to reenlist occurring between the beginning and end of 6- to 8-month overseas deployments were investigated in order to: (1) ascertain the degree to which variations in work-related experiences are reflected in a reconsideration of the reenlistment decision, and (2) identify particular aspects of the work environment that were likely to influence reenlistment decisions. Respondees were 877 first-term enlistees (analysis sample = 424, validation sample = 453) aboard nine U. S. Navy ships participating in a larger investigation of organizational and environmental factors which influence health, morale, and retention. Respondees completed a questionnaire at the beginning and end of their deployments. Results indicated that division specific variance beyond that provided by initial intent did exist. Additional analysis revealed three salient aspects of the work environment were related to changed intention: Work Facilitation, Organizational Conflict, and Professional Esprit de Corps. Implications for management personnel were discussed and suggestions for future research in this area were made.

Situational Determinants of Retention Decisions*

In recent years considerable research effort has been devoted to discovering factors related to increased personnel retention or turnover (cf. Farris, 1971; Schneider, 1976; Bruni, Jones, & James, Note 1; La Rocco, Pugh, & Gundersen, Note 2). Much of this retention research has occurred in military settings where attention has often focused on demographic and personal background characteristics and their relationships to military career decisions. Such an emphasis has identified a number of background characteristics which appear to influence the individual's decision to remain in the military. For example, age, minority status, number of dependents, and membership in larger families have been linked to higher rates of reenlistment, whereas years of education, verbal aptitude, and higher socioeconomic background were shown to be negatively related to military career choices (Singer & Morton, 1965; La Rocco, et al., Note 2; Holter, Stehle, Conner, & Grace, Note 4; Lockman, Stoloff & Allbritton, Note 5).

The above described research on demographic and individual background characteristics provided valuable information for recruiting programs and for determining reenlistment probabilities for particular individuals and groups. On the other hand, such findings are of little help in increasing retention rates among existing personnel, especially among individuals whose backgrounds indicate relatively low probabilities of retention but whose abilities and skills are of high importance to the military. In regard to this latter concern, it would appear more useful to have information about how retention rates are influenced by aspects of the work environment, especially those aspects that are manipulable by management. Literature regarding these influences is less plentiful, however, although some studies have addressed the issue. For example, Bowers (Note 6) reported that an individual's stated intent to reenlist reflected a number of factors in the work situation, including relationships with co-workers and personal autonomy. In a similar vein, Bruni, et al. (Note 1) found that actual reenlistment behavior varied with the individual's type of job, his perception of the work environment, and various aspects of subsystem structure such as centralization of decision-making and formalization of communication procedures.

Other studies have shown that the individual is more likely to remain when he feels that his current work situation compares favorably with available alternatives (Schneider, 1976). Unfortunately, Schneider's study included sailors in their second or third enlistments, thus attenuating his ability to draw conclusions about the underlying dynamics of this comparison process (cf. Festinger, 1957). Bruni, et al. (Note 2) examined first enlistment sailors only, however, and found that persons who rated the Navy as providing an attractive career alternative not only stated more positive reenlistment intentions at the time the career attractiveness ratings were obtained but were also more likely to reenlist up to two years later.

Studies such as those cited above amply illustrate the importance of work conditions in the individual's reenlistment decision. Many of these studies, however, have neglected what appears to be an important dynamic element of the retention process, namely the role of intent. For example, previous studies have found that while stated intent to reenlist (which covaries with work conditions) was the best single predictor of actual reenlistment behavior, individuals with positive retention decisions were more likely to reconsider and change their minds than

individuals who intended to leave the military (Schneider, 1976; La Rocco, et al., Note 2).

Such findings suggest that it is extremely important to investigate the dynamics of changed intentions in order to ascertain the degree to which variations in work-related experiences are reflected in a reconsideration of the reenlistment decisions and, more importantly, to identify particular aspects of the work environment which are likely to maintain positive reenlistment decisions. The following study represents an attempt to explore the relationships between a sailor's intent to reenlist and his work environment experiences during the course of a ship's overseas deployment period.

Method

Respondents

Respondents consisted of 877 first-term enlisted men aboard nine U. S. Navy ships in the Atlantic and Pacific fleets. The sailors in this sample had an average age of 21.8 years, reported a mean of 12.4 years of formal education, and had been in the Navy for an average of two years. Each ship consisted of at least five departments: Weapons, Engineering, Operations, Navigation/Administration, and Supply. Departments were further subdivided into relatively homogeneous divisions consisting of men performing similar tasks. For instance, a Supply Department normally consists of one division concerned with payroll, another with obtaining supplies, a third with food services, and so forth.

Data were obtained by questionnaires administered at the beginning and again at the end of 6- to 8-month overseas deployment periods.

Instruments

Psychological Climate Questionnaire. The basic instrument consisted of a modified version of a 145-item psychological climate questionnaire designed to assess 35 aspects of the perceived work environment. Both the instrument and its development are discussed in detail elsewhere (cf. Jones & James, Note 7) and are only briefly described here. The current study used an abbreviated version of the questionnaire representing 27 of the composites (see Table 1).

Intent to Reenlist. Intent to reenlist was measured at the beginning and end of the deployments and consisted of the following 5-option item:

Which of the following best describes your feelings toward the Navy?

- (a) I definitely want to get out as soon as possible.
- (b) I am pretty sure the Navy is not for me.
- (c) I am not sure whether I'll leave the Navy or not.
- (d) I'll probably stay in the Navy past this enlistment.
- (e) I definitely plan to make or have made the Navy a career.

Procedures

The sample was separated into an analysis ($n = 424$) and a validation sample ($n = 453$), using an odd-even split to assure approximately equal representation for all divisions. Potential influences of division experiences upon retention decisions were assessed by means of a procedure described by Pugh (1976). Namely, a mean intent-to-reenlist score was computed for each division, and this score was used to predict the individual's stated intent to reenlist. Both means and weights were calculated on the analysis sample and cross-validated on the second sample.

Further analyses were conducted within the validation sample to ascertain potential division effects existing prior to deployment. In this phase of the analysis, a part-correlation procedure was used to determine the amount

of variance accounted for by divisions after the effects of initial intent were removed from end of deployment intent.

Additional analyses were performed to explore more specific aspects of the division work environment that might influence the retention decision. In these analyses, individual perceptions of work environment characteristics were aggregated by division, i.e., division means were computed and used as work climate scores. These scores were then regressed against the end-of-deployment intentions to reenlist. The equation was developed on the initial sample and cross-validated. As before, the variance of initial intention was removed from end-of-deployment intention.

Results

Division (Work Situation) Effects

The correlation between individual intent to reenlist at the beginning of the deployment and intent, near the end of the deployment was .60 for the analysis sample. Thus, despite the fact that stated intent to reenlist has been reported to be the best predictor of actual reenlistment behavior, there was at least some change during the course of the deployment.

The possibility that this change was a function of situational influences present during the deployment was investigated by examining the effects of the work situation (represented by division membership) upon stated intentions.

As discussed earlier, the total situational effect attributable to membership in a particular division can be evaluated by using the division mean for post-deployment intent to reenlist scores to predict individual post-deployment intent. However, much of the variance accounted for by this procedure may be sample specific if those people for whom predictions are made are used to compute the mean scores. To reduce sample specificity, division mean scores were computed using subjects in the analysis sample only; these scores were then applied to subjects in the cross-validation sample. Thus the analyses described below were restricted to the cross-validation data.

The analysis of these data showed that the division effect accounted for a significant amount of variance ($R [1/450] = .21, p < .01$). In order to determine whether the division effect represented aspects of the situation existing during the overseas deployment period, variance related to initial intent to reenlist was partialled from post-deployment intent. If stable individual or other factors not specific to the overseas period existed, then the effect should be relatively constant throughout the cruise and thus would be reflected in initial as well as post-deployment intentions. That is, any prediction of post-deployment intent by division effect after initial intent had been removed should reflect conditions specific to the cruise and not pre-cruise conditions. Since it was found that the percentage of variance in post-deployment intentions accounted for by initial intentions (19%; $R [1/451] = .44, p < .01$) was increased to 22% ($R [2/450] = .47, p < .01$) when a combination of initial intent and division effect was used as the independent variable, the amount of criterion variance uniquely predicted by the division effect was significant ($F [1/450] = 17.74, p < .01$). This result indicated that the division effect, which reflected facets of the shipboard situation operating during the deployment, influenced intentions to reenlist.

Significant Aspects of the Work Environment

Based on the above results, it appeared that the individual's post-deployment intent to reenlist reflected not only pre-deployment influences but also experiences during the cruise as represented by a man's particular division assignment. A variety of influences was inherent in this division assignment; therefore, certain analyses were conducted to explore specific attributes of the division situation which might be salient to changed intent. These

analyses focused on facets of the work environment which represented potentially manipulable situational conditions.

Situational aspects of divisions were measured by having individuals rate their divisions on 27 organizational dimensions. A mean score on each dimension was then computed for each division and this score was assigned to every individual in the division. Thus, each person received 27 mean scores which represented organizational attributes of the division in which he worked. For men in the validation sample, it was found that 11 of these scores correlated significantly with post-deployment intent. However, a stepwise multiple regression analysis on the validation data indicated that there was considerable overlap among these dimensions, and three of them--Work Facilitation, Organizational Conflict, and Professional Esprit de Corps--were sufficient to account for variance related to any of the situational dimensions.

Upon cross-validation, these three dimensions were significantly related to post-deployment intentions ($R [1/451] = .20, p < .01$). Note that this multiple correlation was nearly the same magnitude as the cross-validity for the division effect score which is the estimate of the upper limit for this correlation.¹ It was also found that when the three predictors were combined with initial intent that the increment in the amount of variance in post-deployment intentions uniquely accounted for by this equation (2%) was significant ($F [1/450] = 12.20, p < .01$). Therefore, specific facets of divisions related to post-deployment intention to reenlist included Work Facilitation, Organizational Conflict, and Professional Esprit de Corps.

Importance of Job Type

An alternative hypothesis to explain the above results is that it was not experiences related to a specific division that determined post-deployment intent but rather *experiences related to a particular type of work performed* by the division. In order to test this hypothesis, the data were reanalyzed using division type instead of specific division. In other words, all individuals from divisions with similar jobs were combined into a single group. In this way, 23 division types were formed. Within the cross-validation sample, division type did appear to be an important predictor of post-deployment intent since the percentage of variance that was accounted for by a combination of intent and job type was significantly greater than that related to intent alone (19% vs. 21%, $F [1/449] = 8.05, p < .01$). However, the addition of specific division effect to the combination of division type and intent further increased the percentage of criterion variance that was predicted (21% vs. 23%, $F [1/449] = 14.52, p < .01$).

Discussion

The present study attempted to extend current retention research by exploring the effects of situational influences on the reenlistment decision process. The specific purpose of this study was to provide management personnel with a better understanding of the salient conditions within the work environment that influence retention decisions. The work group (division) to which each man was assigned was considered a primary source of situational influences.

The importance of such influences was indicated by the significant relationship between division assignment and individual intent to reenlist measured at the end of the deployment. The specific aspects of the work climate within a division and across job types which were most highly related to post-deployment intent to reenlist were: (a) work facilitation, i.e., the extent to which leadership behavior helps achieve goal attainment; (2) organizational conflict, i.e., the degree to which goals and policies of one subsystem were in conflict with those of other groups in the same organization; and (3) professional esprit de corps, i.e., the degree to which the individual's profession has a good image to outsiders and permits opportunities for growth and advancement.

2

These findings have important implications for management. Of greatest importance was the indication that the influence the Commanding Officer of a ship has on individual retention is less direct than is generally assumed. First, the Commanding Officer cannot influence those individual and demographic variables which previous research has suggested are major influences on retention. Second, the shipboard factors that were related to retention decisions seemed to be most salient at the division work group level where the Commanding Officer's influences are generally felt indirectly through the organizational practices he encourages. For example, work facilitation might reflect the perceived effectiveness of a division petty officer, which, in turn, might depend on the amount of autonomy he has in performing his duties. Similarly, organizational conflict might reflect frustration with red tape and bureaucratic impediments in general. Again, the Commanding Officer's general organizational practices could operate to increase or reduce these perceived conflicts. Professional and organizational esprit, on the other hand, appeared to be related to job type and the implied status and importance of specific jobs, and thus was controlled at levels above the Commanding Officer. Nevertheless, by encouraging unit identification and recognition, pride in the work group can be enhanced by the Commanding Officer.

In interpreting the results of the present study, it should be noted that the average length of time in the service for the sample was two years and that the majority of men had been in their specific divisions for a year or more. Moreover, ships deploy approximately every 18 months, so that many of the sailors were experiencing their second deployments. For these individuals, much of the major impact of division conditions is likely to have already occurred. It may be that individuals who have recently reported aboard ship or who have not previously made a deployment are the most susceptible to influence. This view was supported by a Human Resources Management Report (1976) which stated that reenlistment attitudes become relatively fixed within the first six months after enlistment.

In sum, the results indicated that situational influences during a deployment may, to a limited extent, be manipulated to influence retention decisions. Specifically, it appeared that greater emphasis should be placed on leadership training and command management at the division level in order to increase such elements as leader facilitation and support, subsystem (department and division) cooperation and harmony, and professional (Navy) esprit de corps. It is expected that such efforts would have positive effects on retention and performance. Finally, it appears that such efforts may be especially crucial for personnel with less than one year of service.

Reference Notes

1. La Rocco, J. M., Pugh, W. M., & Gunderson, E. K. E. Identifying determinants of retention decisions. Technical Report No. 76-10, Naval Health Research Center, San Diego, California, 1976.
2. Bruni, J. R., Jones, A. P., & James, L. R. Correlates of first term reenlistment behavior aboard Navy ships. Technical Report No. 75-8, Institute of Behavioral Research, Texas Christian University, Fort Worth, Texas, 1975.
3. Cory, C. H. Biographical differences between Navy recruits grouped by mental level, racial identification, and career intention. Technical Bulletin Stb. 70-2, U. S. Naval Personnel Research Activity, San Diego, California, 1970.
4. Holter, H. A., Bloomgren, E. L., Dow, D. S., Provenzano, R. J., Stehle, G. W., & Grace, G. L. Impact of Navy career counseling on personnel satisfaction and reenlistment. Technical Report No. 2., Systems Development Corporation, Santa Monica, California, 1973.
5. Lockman, R. F., Stoloff, P. H., & Allbritton, A. S. Motivational factors in accession and retention behavior. Research Contribution 201, Office of Naval Research, Institute of Naval Standards, Washington, D. C., 1972.
6. Bowers, D. G. Organizational practices and the decision to reenlist. Unnumbered report, Institute for Social Research, University of Michigan, Ann Arbor, Michigan, 1973.
7. Jones, A. P. & James, L. R. Psychological and organizational climate dimensions and relationships. Unpublished manuscript, Institute of Behavioral Research, Texas Christian University, Fort Worth, Texas, 1976.
8. Human Resources Management Center. Briefing held at Naval Personnel Research and Development Center, San Diego, California, 1976.

¹Pugh (in press) has shown that the variance accounted for by an aspect of a given situation is equal to or less than the total situational effect.

References

- Festinger, L. A theory of cognitive dissonance. Evanston, IL.: Row, Peterson, 1957.
- Pugh, W. M. Assessment of environmental effects: Method and model. Organizational Behavior and Human Performance, in press.
- Schneider, J. The green grass phenomenon: Differential effects of a work context alternative on organizational participation and withdrawal intervention. Organizational Behavior and Human Performance, 1976, 16, 308-333.
- Singer, A. & Morton, A. S. A study of enlisted Navy retention. Personnel Psychology, 1969, 22, 19-31

Table 1
Organizational Climate Composites by Content Area
(Adapted from Jones and James, Note 7)

Job or Task

Role Ambiguity: The extent to which a task is unclear in its demands, criteria, or relationships with other tasks.

Role Conflict: The presence of pressures for conflicting or mutually exclusive behaviors.

*Job Autonomy: The ability of a person in a given job to determine the nature of the tasks or problems facing him and to arrive at a course of action.

Job Variety: The degree to which the job calls for the individual to engage in a wide range of behaviors or to use a variety of equipment in his work.

*Job Feedback: The extent to which an individual is aware of how well he is performing on his job.

Job Challenge: The extent to which a job gives the individual a chance to use his skills and abilities.

Job Pressure: The extent to which there is inadequate time, manpower, training, or resources to complete assigned tasks.

Leadership

Support: The extent to which the leader is aware of and is responsive to the needs of his subordinates. Behavior which enhances someone else's feelings of personal worth and importance.

Goal Emphasis: Behavior that stimulates personal involvement in meeting group goals. Emphasizes high standards of performance and sets an example by working hard himself.

**Work Facilitation: Behavior that helps achieve goal attainment. Such activities as scheduling, coordinating, planning, and providing resources.

Interaction Facilitation: Behavior that encourages the development of close, mutually satisfying relationships within the group.

Planning and Coordination: The degree to which individuals feel that their supervisors are able to plan and coordinate the group's activities so that maximum performance is possible.

Upward Interaction: The degree to which a supervisor is successful in his interactions with higher levels of command.

*Confidence and Trust - Upward: Group members' feelings of trust and confidence in their supervisors.

*Confidence and Trust - Downward: The degree to which supervisors trust the judgment of subordinates.

Work Group

Cooperation: An atmosphere in which there is cooperative effort among individuals to carry out difficult tasks.

Friendliness and Warmth: The extent to which there is communication and trust among members of a work group; the atmosphere is characterized by friendly relations.

Reputation for Effectiveness: The extent to which the group is able to produce work of high quality and quantity.

Work Group Esprit de Corps: The extent to which persons take pride in their group.

*Indicates significant correlations with post-deployment intent to reenlist.

**Unique predictors of post-deployment intent to reenlist.

Table 1
Organizational Climate Composites by Content Area
(Adapted from Jones and James, Note 7)

Total Organization and/or Subsystem

- *Openness of Expression: The degree to which individuals feel the atmosphere is conducive to the expression of individual opinions and ideas.
- Organizational Communication - Downward: The degree to which information is communicated to subordinates concerning impending changes in procedures, policies, and so forth.
- **Conflict of Organizational Goals and Objectives: The degree to which goals and policies of one subsystem are in conflict with those of other groups in the same organization.
- Consistent Application of Organizational Policies: The degree to which organizational policies are consistently and fairly applied.
- **Organizational Esprit de Corps: The degree to which an individual believes the organization performs an important function and offers him opportunities for growth and reward.
- **Professional Esprit de Corps: The degree to which an individual believes his profession has a good image to outsiders and permits opportunities for growth and advancement.
- *Opportunities for Growth and Advancement: The degree to which an individual feels that the organization provides a vehicle for development and advancement of his professional career.
- *Awareness of Employee Needs: The extent to which an organization attempts to assess and respond to its employees' needs and problems.

*Indicates significant correlations with post-deployment intent to reenlist.

**Unique predictors of post-deployment intent to reenlist.

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